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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,764	09/27/2005	Alexander Dardin	278069US0PCT	1825

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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

VASISTH, VISHAL V

ART UNIT	PAPER NUMBER
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1797

NOTIFICATION DATE	DELIVERY MODE
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11/06/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/550,764	Applicant(s) DARDIN ET AL.	
	Examiner VISHAL VASISTH	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission filed on 9/11/2009 has been entered.

Response to Amendment

2. Applicants' amendment filed on 9/11/2009 are in regards to independent claim 1 wherein formulae (I), (II) and (III) were amended to correct minor informalities and overcome the objections to claim 1 from the office action mailed on 5/13/2009. The amendments and arguments addressed below do not overcome the 35 USC 103 rejections over Mishra, Mishra in view of Pappas, Mishra in view of Nesvadba and Mishra in view of Benicewicz. Therefore these rejections from the office action mailed on 5/13/2009 are maintained below and incorporated herein by reference.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the

Art Unit: 1797

subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1-9, 13-14 and 17 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Mishra et al. US Patent No. 5,834,408 (hereinafter referred to as Mishra).

The rejection from Paragraph 5 of office action mailed on 5/13/2009 is maintained and incorporated herein by reference.

Claim Rejections - 35 USC § 103

6. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Mishra in view of Pappas et al., US Patent No. 3,816,314 (hereinafter referred to as Pappas).

The rejection from Paragraph 6 of office action mailed on 5/13/2009 is maintained and incorporated herein by reference.

Claim Rejections - 35 USC § 103

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mishra in view of Nesvadba et al., US patent Application Publication No. 2004/0242813 (hereinafter referred to as Nesvadba).

The rejection from Paragraph 7 of office action mailed on 5/13/2009 is maintained and incorporated herein by reference.

Claim Rejections - 35 USC § 103

8. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mishra in view of Benicewicz et al., US Patent Application Publication No. 2003/0060577 (hereinafter referred to as Benicewicz).

The rejection from Paragraph 8 of office action mailed on 5/13/2009 is maintained and incorporated herein by reference.

Response to Arguments

9. Applicants' arguments filed on 9/11/2009 with respect to claims 1-17 have been considered and are not persuasive.

Applicants argue that Mishra does not necessarily need polymers that read on formulas (I) and (II) as recited in instant claim 1. This argument is not persuasive. Mishra discloses that monomer (a) or (b) has to be present wherein monomer (a) reads on formula (I) as recited in claim 1 and monomer (c) is also necessarily present which reads on formula (II) therefore meeting the claim limitation. One of ordinary skill in the

Art Unit: 1797

art would envisage that monomer (a) and monomer (c) can be used in conjunction from the disclosure of Mishra.

Applicants also argue that Mishra prefers the use of random polymers and that the examples and polydispersity indicate this preference. This argument is also not persuasive. Mishra clearly states in column 4, lines 9-16 that the process in which the polymers of Mishra are prepared allows for block polymers.

Applicants further argue that Mishra does not disclose that the copolymer of the block type wherein the polar component is present in a block of at least three repeating units. The N,N-dimethylamino propyl methacrylamides and N,N-diethylamino propyl methacrylamides disclosed in Mishra can be used along with the other monomer which can be prepared to form block copolymers and one of ordinary skill in the art would envisage that the amine-based methacrylamides could also have at least 3 repeating units from the disclosure of Mishra.

Finally, applicants argue that the present invention provides unexpected results and provide data that allegedly supports the applicants' position. The data submitted, however, is not commensurate with the scope of the claims. For example, claim 1 gives no concentration ranges for the base oil or the additive having friction-modifying properties. The data from the instant specification, however, is very specific in terms of concentration of base oil and additive. Also, claim 1 recites very broad ranges of monomer concentration that make up the friction modifying additive. The instant specification, however, uses very narrow ranges for monomers and repeating units and further has embodiments that include the monomer segments of formulae (III) which is

Art Unit: 1797

merely an optional component as written in instant claim 1. Furthermore, the R groups in formulae (I), (II) and (III) are much broader than the specific acrylates and compounds recited in the instant specification. The criticality for the ranges of R groups needs to be shown in order for there to be unexpected results for all compounds that are represented by formulae (I), (II) and (III).

In order to show unexpected results applicants need to further compare their example oils to the closest prior art in order to show that the block copolymers of their invention are unexpected in light of the block copolymers disclosed in Mishra.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VISHAL VASISTH whose telephone number is (571)270-3716. The examiner can normally be reached on M-R 8:30a-5:30p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571)272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1797

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

VVV

/Ellen M McAvoy/
Primary Examiner, Art Unit 1797